## RANA PIPA.

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CHARACTER GENERICUS.

Corpus tetrapodum, nudum, ecaudatum.

Lin. Syft. Nat. p. 354.

CHARACTER SPECIFICUS, &c.

RANA digitis anticis muticis quadridentais, pofticis unguiculatis.

Lin. Syft. Nat. p. 354. Seb. Muf. 1. t. 77. Mer. Sur. t. 59. Vallifn. Nat. 1. t. 41. f. 6.

Solent communes ranæ sæminæ ova sua in sossi et aquis stagnantibus, punctis mille nigris fimilia, glutine copiofo contenta, primo vere deponere. Puncta hæc, ranarum futurarum veri embryones, elapfis paucis diebus, mole augentur, colore funt minus fufco, e glutine circumfuso emergunt, et in aquis libere natant. Gyrinorum nomine nunc probe cognofcuntur, et corpore funt prægrandi, fine ullis pedum vestigiis, cauda autem maxima pinniformi : ex utraque etiam parte thoracis apparent branchiæ ramofæ, feu organa refpi-Elapfo longo tempore, illifque nihil nifi rationis. magnitudine mutatis, branchiæ ramofæ decidunt, pedes anteriores e cute emergunt, et paulo post pedes posteriores. I 2

posteriores. Vivit adhuc animal in aqua in qua primum nascebatur, cauda etiam remanente. Post aliquot tamen septimanas hæc quoque sensim decressens, tandem evanescit : jamque rana persecta in terram progreditur, abhinc pro arbitrio vel in humo vel in aquis degens.

Talis eft ranarum omnium Europœarum transformationis feries (exceptis aliquot differentiis in figura et difpofitione ovorum in variis fpeciebus). At vero in America Auftrali hujus generis eft fpecies, quæ inter omnia ludentis Naturæ miracula primum fibi locum videtur vindicare. Pullos enim more prorfus infolito e cellulis, feu concavis tuberculis in dorfo fitis excludit. Differt igitur hæc ranæ fpecies, utpote vivipara, ab omnibus fui generis, nec non ab aliis animalibus, infolito geftandi et parturiendi modo.

Surinamiam incolit rana hæc monftrofa. Color illi (faltem in fpeciminibus quæ ad nos pervenerunt) eft plerumque plus minus fufcus, et interdum pene nigricans; interdum multo pallidior. Animal eft immodice deforme; caput antica parte acuminatum gerens, roftro velut fuillo. Pedum anticorum digiti extremitates habent quadrifidas.

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Affirmat CAMPER, vir anatomes peritifiimus, Pipam uterum, feu ovarium internum habere, ovaque fua, eodem modo quo et alia hujus generis animalia, excludere; et, fi qua fides FERMINO, (qui fe teftem oculatum tam miræ rei fuiffe afferit,) mas ova a fæmina depofita pedibus congregat, dorfoque fæminæ imponit, quæ fecundata, intra cellulas dorfuales illa recipit, et occludit, donec paulatim perfectam ranæ formam adepta, iterum excludantur.

Animal

Animal hoc tam fingulare unicum tantum partum edere voluit Natura, nec cum aliis fui generis fpeciebus collatum, fœcundum haberi poteft; Pipa enim quam obfervavit FERMINUS, quinque diebus feptuaginta quinque pullos produxit.

## THE

## PIPA,

## O R

TOAD OF SURINAM.

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GENERIC CHARACTER.

Body four-footed, naked, without tail. Lin. Syft. Nat.

SPECIFIC CHARACTER, Sc.

FROG with the toes of the fore-feet quadrifid at their extremities; the hind-feet webbed and clawed.

> Seba. vol. 1. t. 77. Mer. Sur. t. 59.

The fpawn of the common frog is deposited in large heaps or clufters by the females in ftagnant fhallow waters and ditches in the early part of the fpring; it confifts of a congeries of black globular points, furrounded with a confiderable depth of gelatinous fubftance. The black points are no other than the real embryos of the future frogs; in a few days they enlarge, change to a fomewhat lighter colour, and break through the furrounding gluten, and fwim in the water



In this flate they are well known by the name ter. of tadpoles, and confift of a very large body, with no appearance of legs, but furnished with a very remarkable fin-fhaped tail, and on each fide the breaft is a fet of ramified branchiæ, or refpiratory organs. After having lived for a confiderable fpace in this state, with little other change of appearance than an increase of fize, the ramified parts drop away, and the fore-legs appear; thefe are foon fucceeded by the hinder ones, and the animal still continues to inhabit the water in which it was hatched; it is still furnished with the tail, which at this period of its growth makes a confpicuous appearance; but, after fome weeks this alfo fhortens by degrees, and the animal, having attained its perfect figure, ventures upon land, and from that time is at pleafure an inhabitant of either element.

Such is the change (with fome few variations as to the figure and difpolition of the fpawn in the different fpecies) which the animals of this genus undergo in all the kinds which belong to Europe; but in South America we have an inftance in a fpecies of this fame genus, of one of the most extraordinary particularities which the whole compass of Natural History can exhibit: for in this animal, (which is called the Pipa, or Surinam Toad,) as if by a caprice of nature, unparallelled by any other known animal, and diametrically opposite to the established laws of production in other creatures, the young are produced, perfectly formed, out of cells, or hollow tubercles placed on the back of the female. This species therefore forms an exception tion to the reft of the Frog-genus in being viviparous, and is likewife an exception to the general way of production in all other larger animals.

This moft extraordinary creature is a native of Surinam. Its colour, (at leaft in fuch fpecimens as are brought over to Europe) varies confiderably in different fubjects; but it is generally brown, more or lefs deep, and in fome, even approaches to blacknefs. It is a fpecies of moft ftriking deformity; the head is of a fort of pointed fhape, the fnout fomewhat like that of a hog; and the toes of the fore-feet are at their extremities divided into four fmall proceffes.

I fhould not omit to obferve, that according to the celebrated anatomift Camper, the Pipa is furnifhed with an internal uterus, or ovarium, and excludes its ova in the manner of other animals of this genus; and, from the obfervations of Fermin, (who declares he was an eye witnefs of the ftrange procefs,) it appears, that the male, after the exclusion of the ova, collects the whole heap, with his paws, and depofits it on the back of the female, where, (after impregnation) they are received into the cellules, which clofe over them, and in which they gradually arrive at their complete form, and are then again excluded.

This fingular animal is calculated by nature for bearing young but once; and, compared with others of its genus, it cannot be regarded as very prolific; the number which the female Pipa, obferved by Fermin produced, was feventy-five, which were all excluded in the fpace of five days.